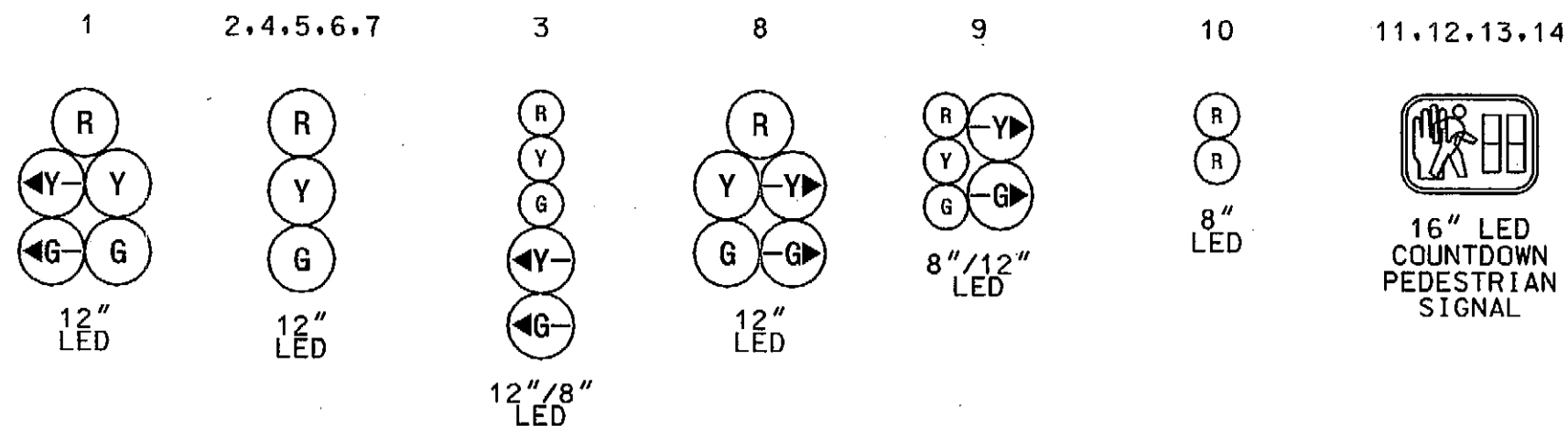
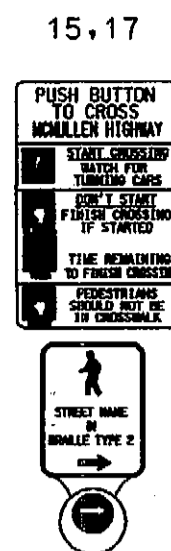
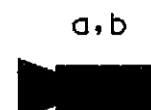


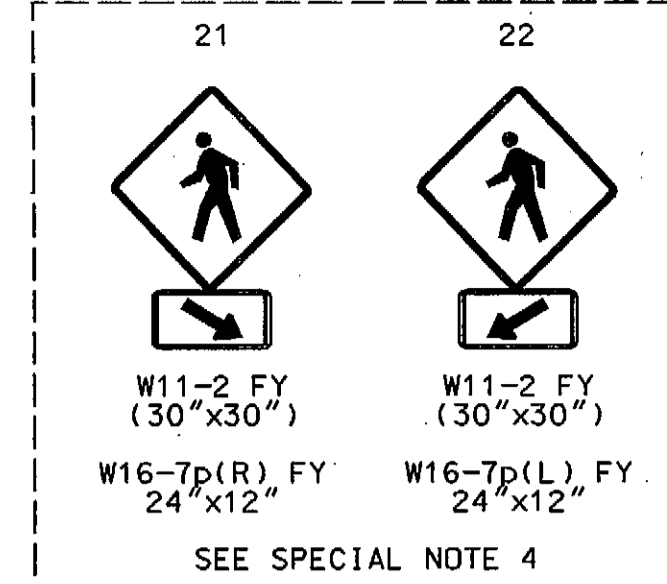
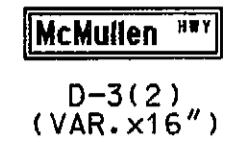
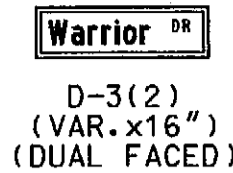
### PROPOSED SIGNALS



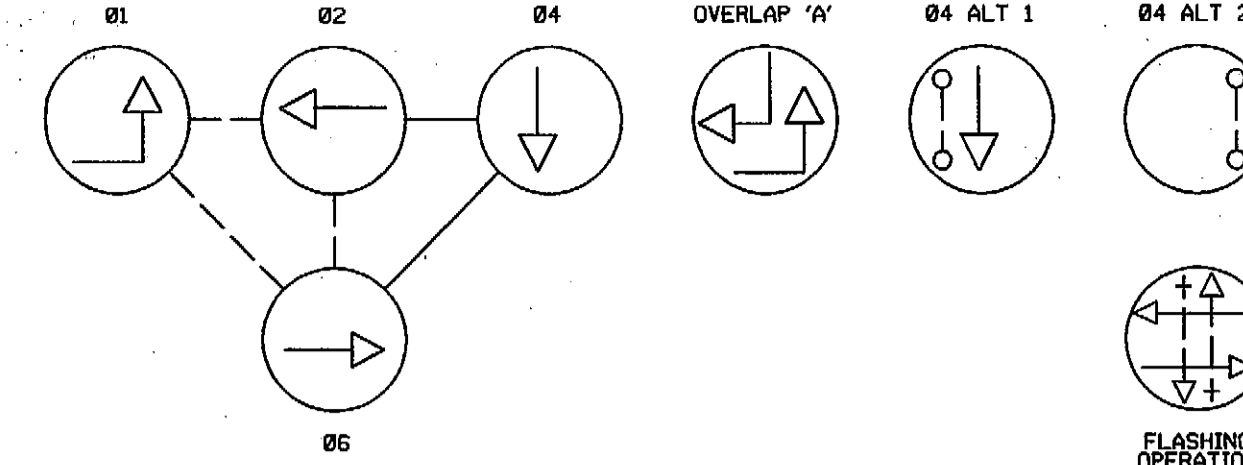
### PROPOSED VIDEO DETECTION CAMERAS



### PROPOSED SIGNS



### NEMA PHASING



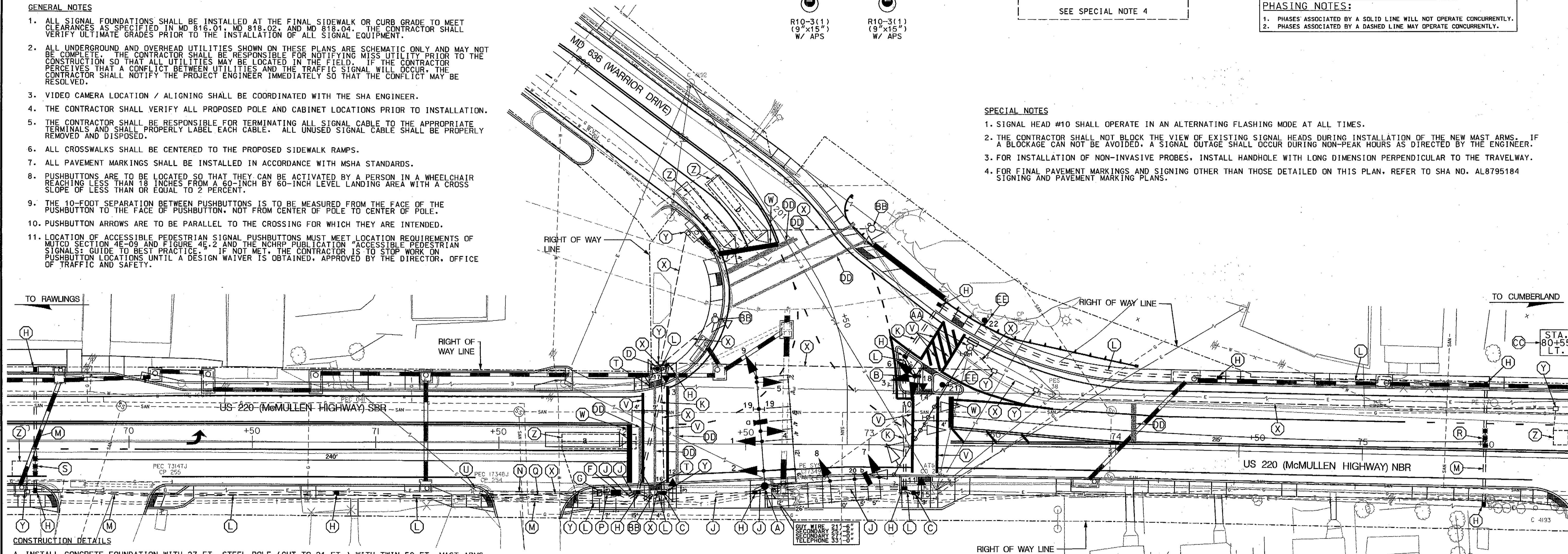
- PHASING NOTES:**
- PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
  - PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.

### GENERAL NOTES

- ALL SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE TO MEET CLEARANCES AS SPECIFIED IN MD 816.01, MD 818.02, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINAL AND SHALL PROPERLY LABEL EACH CABLE. ALL UNUSED SIGNAL CABLE SHALL BE PROPERLY REMOVED AND DISPOSED.
- ALL CROSSWALKS SHALL BE CENTERED TO THE PROPOSED SIDEWALK RAMPS.
- ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 INCHES FROM A 60-INCH BY 60-INCH LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2 PERCENT.
- THE 10-FOOT SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACE OF THE PUSHBUTTON TO THE FACE OF PUSHBUTTON, NOT FROM CENTER OF POLE TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SECTION 4E-09 AND 4E-12 AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

### SPECIAL NOTES

- SIGNAL HEAD #10 SHALL OPERATE IN AN ALTERNATING FLASHING MODE AT ALL TIMES.
- THE CONTRACTOR SHALL NOT BLOCK THE VIEW OF EXISTING SIGNAL HEADS DURING INSTALLATION OF THE NEW MAST ARMS. IF A BLOCKAGE CAN NOT BE AVOIDED, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
- FOR INSTALLATION OF NON-INVASIVE PROBES, INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO THE TRAVELWAY.
- FOR FINAL PAVEMENT MARKINGS AND SIGNING OTHER THAN THOSE DETAILED ON THIS PLAN, REFER TO SHA NO. AL8795184 SIGNING AND PAVEMENT MARKING PLANS.



### CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH 27 FT. STEEL POLE (CUT TO 21 FT.) WITH TWIN 50 FT. MAST ARMS. TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARMS, AND 3 IN. WEATHERHEAD (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE). LOCATE CENTER OF FOUNDATION AT STA 72+58, 17 FT. RIGHT.
- INSTALL CONCRETE FOUNDATION WITH 14 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, TRAFFIC SIGNAL HEADS, POLE-MOUNTED 16" LED PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS McMullen Highway") (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, POLE-MOUNTED 16" LED PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS McMullen Highway") (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).
- REMOVE EXISTING PEDESTAL POLE. INSTALL 10 FT. STEEL PEDESTAL POLE ON EXISTING FOUNDATION WITH BREAKAWAY BASE, POLE-MOUNTED 16" LED PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS McMullen Highway") (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, POLE-MOUNTED 16" LED PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS Warrior Drive") (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).
- INSTALL NEMA SIZE "6" BASE MOUNTED CONTROLLER AND CABINET WITH 2-WIRE CENTRAL CONTROL UNIT, APS CENTRAL CONTROL UNIT, AND FOUNDATION (SIDEWALK TO BE USED AS CONCRETE PAD) (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE).

- INSTALL 2 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- INSTALL 2 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED) FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE CP 254 FOR USE BY OTHERS.
- INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1000 FT. LEAD-IN CABLE.
- INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 500 FT. LEAD-IN CABLE.
- SIDEWALK RAMP AND DETECTABLE WARNING SURFACE TO BE INSTALLED AS PART OF SHA CONTRACT NO. AL8795184.
- USE EXISTING WOOD UTILITY POLE CP 254.
- INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE (CROSSWALK).
- INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE (STOPLINE).
- CAP AND ABANDON EXISTING CONDUIT.
- REMOVE EXISTING HANDHOLE.
- ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP WIRE FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES, AND CONTROLLER.
- REMOVE EXISTING SIGNAL POLE, MAST ARM, SIGNAL CONTROLLER, AND ALL ASSOCIATED EQUIPMENT. SHA SIGNAL SHOP SHALL BE NOTIFIED TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET.
- REMOVE EXISTING PEDESTAL POLE AND ALL ASSOCIATED EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- REMOVE ABANDONED LEGACY ATR STATION AND ALL ASSOCIATED EQUIPMENT AT STA. 80+55 LEFT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- REMOVE EXISTING PAVEMENT MARKINGS.
- PROPOSED SIGN TO BE INSTALLED AS PART OF THE SIGNING AND PAVEMENT MARKING PLAN (SHA NO. AL8795184).

- INSTALL 200 AMP METERED PEDESTAL POLE (1-4 IN. AND 2-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL HANDHOLE.
- INSTALL 4 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED).
- INSTALL 3 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 3 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED).
- INSTALL 4 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE CP 254 FOR USE BY OTHERS.

**McCormick  
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GEOMETRIC LEGEND	
---	EXISTING
---	PROPOSED
UTILITY LEGEND	
---	STORM DRAIN
---	GAS MAIN
---	WATER MAIN
---	SEWER MAIN
---	ELECTRIC CABLES
---	AERIAL CABLES
---	TELEPHONE CABLES
---	FIBER-OPTIC

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

**US 220 FROM MD 53 TO  
0.41 MILES NORTH OF MD 636  
PHASE I (CRESAPTOWN)**

APPROVALS		REVISIONS		TRAFFIC SIGNALIZATION PLAN - US 220 @ MD 636	
TEAM LEADER				SCALE 1" = 20'	DATE 7-29-82 CONTRACT NO. A-669-501-676
ASST. DIR. CHIEF				DESIGNED BY	COUNTY ALLEGANY COUNTY
DIVISION CHIEF				DRAWN BY J HOYAS	LOGMILE
OFFICE DIRECTOR				CHECKED BY	T.I.M.S. NO. G971
				F.A.P. NO. SEE TITLE SHEET	T.O.D. NO. NA
				T.S. NO. 1852 B	SG-01 OF SG-04 SHEET NO. 104 OF 121

PLOTTED: Friday, June 20, 2008 AT 07:56 AM  
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